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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,602	07/01/2003	James L. Bailey	61501-0003	4808
9629	7590	04/11/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			MASIH, KAREN	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,602

Applicant(s)

BAILEY ET AL.

Examiner

karen masih

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/9/05
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labriola II in view of Galecki et al .Labriola II discloses system for controlling motor comprising module processor in communication with central processor and feedback circuitry in communication with module processor, see fig 1 #50, #56 and col 6 lines 4-65. Labriola II lacks disclosing central processor in communication with encoder. Galecki et al discloses encoder in communication with central processor, see fig 6 #56 and #52 as well as col 12 lines 50-55. It would have been obvious to one of ordinary skill in the art to combine the control system of Labriola II with the encoder with central processor of Galecki et al for improved control. With respect to claim 3 it is disclosed in Labriola as #42.

3. Claims 2-8,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labriola II in view of Galecki et al as applied to claims 1,3 above, and further in view of Stanton et al , Giacomini et al and Miyanari.

Labriola II and Galecki et al discloses control system as disclosed above , but lacks encoder that provides rotor and stator positional information, controls one or more coils of motor, feed back of temperature and coil condition (as best understood), H bridge circuits . Stanton et al discloses rotor and stator positional information col 5 lines 35-40. Miyanari discloses H bridge in fig 5 and controls one or more coils in col 3 lines 1-10. Giacomini et al discloses temperature and coil conditions see claim 6 and #28 fig 1 . It

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would have been obvious to one of ordinary skill in the art to combine the control system of Labirola II and Galecki et al with encoder with rotor and stator positional information of Stanton et al since that is typical of an encoder , and H bridge and controlling of coils of Miyanari and feedback of temperature and coil condition of Giacomini et al for improved control .

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanton et al in view of Miyanari and Hlavinka et al .

Stanton et al discloses rotor position based on data received from encoder , col 5 lines 35-40. Stanton et al lacks disclosing determining how to energize coils , directing power module to provide current to appropriate coils , and monitoring rotor response . Miyanari discloses how to energize coils and direction module to provide current to appropriate coils , see col 2 lines 30-50 and col 3 lines 1-10 and col 4 lines 25 -40 . Hlavinka et al disclose monitoring rotor response ,see col 8 lines 35-45. It would have been obvious to one of ordinary skill in the art to combine rotor position received from encoder of Stanton et al with how to energize coils and providing current to appropriate coils of Miyanari which is common in motor control and monitoring rotor response of Hlavinka et al for improved control .

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6. With respect to applicant's arguments

7. Examiner does not understand how applicant cannot follow the art rejection, so once again, Examiner will point out elements. Labiorla discloses system for controlling motor comprising module processor in communication with central processor and feedback circuitry in communication with module processor, fig 1 #50 is the central processor (control computer), #56 is module processor., as shown by arrows, there is feedback, col 6 lines 4-65 further discuss this. Galecki discloses encoder in communication with central processor. In fig 6 #52 discloses central processor, while #56 as discussed in col 12 lines 50-55 discusses how encoder with motor represents I/O as shown in #56.

8. In response to applicant's argument that Labriola and Galecki is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, it is the subject matter that is being taught that are similar.

9. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, for improved control.

10. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

11. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).


12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to karen masih whose telephone number is 571-272-2068. The examiner can normally be reached on m-f 8.30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, david martin can be reached on 571-272-2800 ext 41. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


karen masih
Primary Examiner
Art Unit 2837

KM